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| 10/801,773 | 03/16/2004 | Richard H. Hall | PROJ-10-60X | 3128 |
| 7590 | 06/21/2006 | | EXAMINER | |
| Christopher John Rudy Ste. 8 209 Huron Ave. Port Huron, MI 48060 | | | THEXTON, MATTHEW | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1714 | |

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,773

Applicant(s)

HALL, RICHARD H.

Examiner

Matthew A. Thexton

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date one sheet.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

The IDS submitted 2004 April 1 has(have) been considered. Duplicate citation(s) has(have) been lined through, retaining the earlier(earliest) filed citation(s).

The citation to the provisional application has been lined through because it is clearly considered since Applicant asserts benefit to it and because it is not a published document.

Claims Version

The listing of claims submitted in the paper filed originally has been examined.

Claims Analysis

Claim 1 is directed to solid material comprising:

- an organic spill absorbing material having absorbed therein;
- a liquid organic compound or composition selected from the group
consisting of: a halogenated organic; a fire retardant that is not the
halogenated organic; a stupefying agent that is not the halogenated
organic; and mixtures thereof.

Claim 2 depends from claim 1 and specifies or further limits: the type of organic spill material.

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Claims 3-6 depend directly or indirectly from claim 1 and specify or further limit: the liquid organic compound or composition is a halogenated organic or halogenated hydrocarbon.

Claims 7-10 depend directly or indirectly from claim 1 and specify or further limit: the liquid organic compound or composition is a fire retardant; the retardant is a halogenated organic.

Claims 11-14 depend directly or indirectly from claim 1 and specify or further limit: the liquid organic compound or composition is a stupefying agent; the agent is a halogenated organic.

Independent claim 15 is directed to methods of fire fighting comprising "transmitting" to a base of the fire a solid composition which embraces

- an organic spill absorbing material in which is absorbed
- a liquid organic compound or composition including a "suitable" flame retardant under conditions such that said absorbed liquid is released in liquid or vapor form.

Claim 16 depends from claim 15 and specifies or further limits: the type of organic spill material.

Claim 17 depends from claim 16 and specifies or further limits: the liquid organic compound or composition is a halogenated organic.

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Independent claim 18 is directed to methods of providing stupefaction comprising “transmitting” said (sic) solid composition which contains a “suitable” stupefyer under conditions such that said absorbed liquid is released in liquid or vapor form.

Claim 19 depends from claim 18 and specifies or further limits: the type of the (sic) organic spill material.

Claim 20 depends from claim 19 and specifies or further limits: the (sic) liquid organic compound or composition is a halogenated organic.

The limitation “organic spill absorbing material” refers to a property which appears to be coincident with the presence of the liquid organic compound or composition, and thus does not appear to provide any further distinction to the claims.

Claim Objections

Claims 1-14 are objected to under 37 CFR 1.75(i) as being in improper form because each of a plurality of elements or steps of the claim should be separated by a line indentation. See MPEP § 608.01(m). the absorbing material and the organic compound or composition are two elements, which should be separately indented.

Claim(s) Rejection(s)- 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The embodiments "a fire retardant that is not the halogenated organic" are not described. In the first instance, as understood from the specification, fire extinguishing agents are intended here, which is distinguished in the parlance from fire retardants which are materials added to polymers, etc. and which function differently from the vapor or liquid action of the described and enabled liquid extinguishants. Second, as understood from the specification, the fire extinguishing agents intended are liquid, in contrast the claim recitation "that includes a substance" opens the limitation of said liquid organic compound or composition to being merely the carrier to dissolved, non-liquid members of said group; which is neither described or enabled. Pursuant to this, other than water, it not thought that liquid, non-halogenated fire extinguishants are known. Soehngen (US 4276179) discloses polymer having a substance, such as oil, wax, or fat, which absorbs or contains halogenated hydrocarbons (column 2, lines 7-24); a concept encompassed by Applicant's claims but not described or enabled.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for fire extinguishing agents, does not reasonably provide enablement for "a fire retardant that is not the halogenated organic". The

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specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. In the first instance, as understood from the specification, fire extinguishing agents are intended here, which is distinguished in the parlance from fire retardants which are materials added to polymers, etc. and which function differently from the vapor or liquid action of the described and enabled liquid extinguishants. Second, as understood from the specification, the fire extinguishing agents intended are liquid, in contrast the claim recitation "that includes a substance" opens the limitation of said liquid organic compound or composition to being merely the carrier to dissolved, non-liquid members of said group; which is neither described or enabled. Pursuant to this, other than water, it not thought that liquid, non-halogenated fire extinguishants are known. This embodiment constitutes an invitation to experiment and invent in order to determine the scope of the claims. Soehngen (US 4276179) discloses polymer having a substance, such as oil, wax, or fat, which absorbs or contains halogenated hydrocarbons (column 2, lines 7-24); a concept encompassed by Applicant's claims but not described or enabled.

It is suggested that deleting "that includes a substance" and "that is not the halogenated organic" (both instances) would obviate the above rejections. Further deleting "certain of" is suggested because it is thought that this is superfluous.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "said solid composition" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the organic spill absorbing material" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "the liquid organic compound or composition" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

35 USC § 102 and 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim(s) Rejection(s)

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Greminger, Jr., et al. (US 4573578).

The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '578 discloses derivatized cellulose particle absorbing epichlorohydrin (Table).

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hall et al. (US 3750688).

The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '688 discloses polymer particles (column 4, lines 3-5, 40-43) absorbing chlorobenzene (example 11).

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Larson et al. (US 4302337).

The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '337 discloses polymer particles (column 1, lines 55-68) absorbing 1,1,1-trichloroethane and o-dichlorobenzene (column 2, line 34).

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Claims 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. (US 4302337) as applied to claim 1 above, and further in view of Official Notice.

The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '337 discloses polymer particles (column 1, lines 55-68) absorbing "chlorinated solvents" (column 2, line 33).

Official Notice is taken of chloroform and other well known chlorinated hydrocarbon compounds which are well known to act as both solvents and fire extinguishing agents, and in the case of chloroform as stupefying agent and solvent. It would have been obvious to one of ordinary skill in the art at the time of the invention to processes contaminated water streams containing such solvents given the suggestion of '337 to do so, and with a reasonable expectation of success, thus arriving at subject matter encompassed by these claims.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Buijtenhuijs et al. (US 2001/0020602A1).

The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '602 discloses granular or powdery hydrophobic polymer which swells ([0010]) and absorbs chlorinated hydrocarbons (abstract, examples). Although

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the examples all employ a second embodiment in which the absorbent is particle of polypropylene loaded with liquid hydrophobic substances such as soybean or castor oil, the ordinary artisan would immediately envisage the substitution of the solid polymers [0010]. The use as disclosed results in material which is subject matter encompassed by Applicant's claims.

In the event the reference is deemed to be of not sufficient specificity to sustain a conclusion of anticipation, then it is concluded that it would have been obvious to one of ordinary skill in the art at the time of the invention to have followed the plain suggestions of '602 and substituted the absorbing polymer of [0010] in the techniques described (examples) to absorb the chlorinated compounds, including chloroform, thus resulting in material which is subject matter encompassed by Applicant's claims.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schneider et al. (EP 388140A1).

The present claims are broadly discussed hereinabove in the section ***Claims Analysis*** which is incorporated by reference.

The reference '140 discloses granular polystyrene which absorbs chlorinated hydrocarbons (page 7, lines 17-39, examples). Although the examples do not employ a stupefying agent or a fire extinguishing agent, the ordinary artisan would immediately envisage the substitution of such from the species listed (page 7). The use as disclosed results in material which is subject matter encompassed by Applicant's claims.

In the event the reference is deemed to be of not sufficient specificity to sustain a conclusion of anticipation, then it is concluded that it would have been obvious to one of ordinary skill in the art at the time of the invention to have followed the plain suggestions of '140 and substituted from the species listed (page 7) in the techniques described (examples) to absorb the chlorinated compounds, including chloroform, thus resulting in material which is subject matter encompassed by Applicant's claims.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Oemler (US 3147216) discloses particles of polyethylene and polypropylene absorbing hydrocarbons and halohydrocarbons. This reference is considered cumulative to those relied upon in rejections set forth hereinabove.

Olmsted (EP 023111A1) discloses polymers particles suitable for absorbing polychlorinated biphenyls. This reference is considered cumulative to those relied upon in rejections set forth hereinabove.

Jarre et al. (US 4237237) discloses polymers suitable for absorbing halogenated hydrocarbons (column 5, lines 35-44). This reference is considered cumulative to those relied upon in rejections set forth hereinabove.

Allowable Subject Matter

Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-20 are free of prior art rejections.

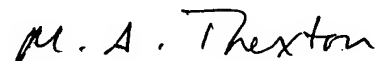
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 571-272-1125. The examiner can normally be reached on Tuesday-Friday, 10:00 to 7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S. Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Matthew A. Thexton
Primary Examiner
Art Unit 1714
matthew.thexton@uspto.gov